(FILE 'HOME' ENTERED AT 15:24:02 ON 29 MAY 2006)

FILE 'REGISTRY' ENTERED AT 15:25:06 ON 29 MAY 2006 1 S BISPHENOL A/CN

L1

L36

```
FILE 'CAPLUS, CAOLD' ENTERED AT 15:25:26 ON 29 MAY 2006
L2
             0 S DEVOLOTIL?
L3
          3543 S DEVOLATIL?
L4
            42 S L3 AND SPRAY?
             4 S L4 AND SALT
L5
            88 S L3 AND SALT
L6
             6 S L6 AND HYDROXIDE
L7
             5 S L7 NOT L5
L8
L9
             2 S L8 AND PARTICLE
L10
             3 S L8 NOT L9
L11
        14428 S L1
L12
             4 S L11 AND DEVOLATI?
             1 S L12 AND SALT
L13
L14
             3 S L12 NOT L13
L15
            89 S DEVOLATI? AND SALT
L16
            6 S L15 AND HYDROXIDE
L17
            0 S L16 AND SPRAY
L18
            5 S L16 NOT L5
L19
            0 S L18 NOT L8
L20
           42 S DEVOLATI? AND SPRAY?
L21
            9 S L20 AND PARTICLE
L22
            9 S L21 NOT L5
            9 S L22 NOT L8
L23
L24
             9 S L23 NOT L12
L25
            0 S L24 AND SALT
         7440 S PHENOLATE
L26
            54 S L26 AND L1
L27
            14 S L27 AND SALT
L28
            2 S L28 AND HYDROXIDE
L29
L30
            12 S L28 NOT L29
L31
            12 S L30 NOT L5
L32
            12 S L31 NOT L24
L33
           12 S L32 NOT L16
L34
            0 S L33 AND SPRAY?
L35
            0 S L33 AND PARTICLE
```

0 S L33 AND DEVOLATI?

```
ANSWER 1 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
L5
AN
     2005:185465 CAPLUS
DN
     142:280544
ΤI
     Method for making salts hydroxy-substituted hydrocarbons
IN
     Guggenheim, Thomas Link; Brunelle, Daniel Joseph; Woodruff, David
     Winfield; Bergman, Lee Harris; Johnson, Norman Enoch; Littlejohn, Matthew
     Hal; Khouri, Farid Fouad
     General Electric Company, USA
PΑ
     U.S. Pat. Appl. Publ., 14 pp.
SO
     CODEN: USXXCO
DT
     Patent
LΑ
     English
FAN.CNT 1
                       KIND DATE
     PATENT NO.
                                           APPLICATION NO.
                                                                   DATE
                         ----
                                 -----
     US 2005049439
                        A1 20050303 US 2003-647890 20030825
A1 20050310 AU 2004-268988 20040824
PΙ
     AU 2004268988
     WO 2005021477
                         A2 20050310 WO 2004-US27433
                                                                     20040824
                         A3
     WO 2005021477
                                20050519
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
             SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
             SN, TD, TG
PRAI US 2003-647890
                          Α
                                 20030825
     WO 2004-US27433
                         W
                                 20040824
OS
     MARPAT 142:280544
AB
     Title method comprises the steps of (i) contacting in solvent media at
     least one hydroxy-substituted hydrocarbon (e.g., bisphenol A) with a base
     comprising an alkali metal cation (e.g., sodium hydroxide); and (ii)
     devolatilizing the solvent media (e.g., water) comprising alkali
     metal salt by adding or spraying the solvent media
     into a substantially water-immiscible organic solvent, the solvent being at a
     temperature greater than the b.p. of solvent media at the prevailing pressure.
     In one embodiment the solvent media comprises water, and optionally at
     least one water-soluble protic organic solvent (e.g., methanol).
L5
     ANSWER 2 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
AN
     1986:52122 CAPLUS
DN
     104:52122
TI
     Deposition of resin dispersions on metal substrates
     Higginbottom, Harold Powell; Drumm, Manuel Felix
ΙN
PΑ
     Monsanto Co., USA
SO
     Eur. Pat. Appl., 46 pp.
     CODEN: EPXXDW
DT
     Patent
LΑ
     English
FAN.CNT 4
                      KIND
                                            APPLICATION NO.
     PATENT NO.
                                                                   DATE
                               DATE
                         ----
                                             -----
                                 -----
PΙ
     EP 147382
                          A2
                                 19850703
                                             EP 1984-870190
                                                                     19841221
                          A3
     EP 147382
                                 19860416
     EP 147382
                         B1
                                 19880511
         R: BE, DE, FR, GB, IT, NL, SE
US 4501864 A 19850226
US 4557979 A 19851210
CA 1227162 A1 19870922
AU 8437053 A1 19850822
AU 562805 B2 19870618
JP 60177199 A2 19850911
PRAI US 1983-564638 A 19831222
                                             US 1983-564638
                                                                     19831222
                                             US 1984-581382
                                                                   19840217
                                             CA 1984-469606
                                                                    19841207
                                             AU 1984-37053
                                                                    19841221
                                            JP 1984-270568
                                                                     19841221
```

US 1984-581382 A 19840217

A resin blend comprising a poly(3,4-dihydro-3-substituted-1,3-benzoxazine) AΒ and a reactive polyamine forms a film or a coating on a metal substrate by electrodeposition. The resin blend is dispersed in an aqueous medium containing a protonating acid and is subjected to cathodic electrophoresis to form an adherent film, which is dried and heat-cured at relatively low temps. without evolution of volatile matter. Thus, bisphenol A 100, PhMe 70, and PhNH2 81.5 parts were mixed together under N, heated to 50°, 108 parts of 50% formalin were added, the reaction mixture was refluxed at 65°, the aqueous phase was separated and removed, and the product was worked up to give devolatilized resin having equivalent weight 278 and dry rubber cure with a reactive polyamine at 135° of 80 s. A paint dispersion was prepared by mixing a reactive polyamine (prepared by reaction of Epon 1004 F resin with a diketimine and Araldite DY027 (an aliphatic monoglycidyl ether) with devolatilized resin in hexyl Cellosolve and MeCO iso-Bu. The blend was added to H2O to form a dispersion, and mixed with ground pigment. The composition was electrocoated on Zn phosphated steel panels at 28° and baked at 135° to form a coating which survived  $\geq 200$  MeCOEt double rubs and had  $\leq 1.25$  mm scribe creep in 500 h salt spray corrosion tests.

L5 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1970:22663 CAPLUS

DN 72:22663

TI Water-soluble synthetic resins

IN Daimer, Wolfgang; Lackner, Heinrich

PA Vianova Kunstharz A.-G.

Ger. Offen., 10 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

SO

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 1920496		19691113	DE 1969-1920496	19690421
	FR 2007649			FR	
	GB 1260947			GB	
	US 3654203		19720404	US	19690421
	ZA 6902332		19690000	ZA	
PRAI	AT		19680502		

AB The title polymers consist of the reaction products of diene polymers and C6 or higher unsatd. carboxylic acids, and are water-soluble after neutralization and have acid number ≥40 mg KOH/g. Thus, a mixture of 420 g distilled dehydrated castor oil fatty acids (I) containing ≥30% conjugated unsatd. fatty acids, and 430 g liquid polybutadiene (II) with viscosity 5 P at 20° was heated to 280° and stirred at this temperature until a 70% solution of the product in BuOCH2CH2OH, neutralized to pH 9 with Et3N, was clear and infinitely soluble in water. The mixture was then devolatilized at 280°/10 mm, giving a product with acid number 100 mg KOH/g and viscosity 70 cP at 20° as a 66% solution in EtOCH2CH2OAc (III). A similar mixture of 325 g II and 525 g I was heated at 270° until its viscosity as a 60% solution in III was 2 P at 20°. A mixture of 150 g styrene and 1 g tert-Bu2O2 was added over 2 hr to 850 g of this product at 200°, and was heated at 200° until the viscosity of the reaction product as a 66% solution in III was 6 P at 20°. The resin was devolatilized, dissolved in EtOCH2CH2OH, and neutralized with Et3N, giving a 70% solids solution with pH 8.5. A curing composition was prepared by mixing 290 g resin solution with 70 g red Fe oxide, diluting with 2000 g distilled water, and adjusting to pH 8.5 with Et3N. The composition was electrolytically coated onto a steel plate which served as the anode in the system. At 100 V, a tough film was deposited after 1 min, and gave an unflawed coating after 30 min at 160°, even without water washing. The coatings were hard, elastic, and had outstanding salt spray resistance. The reaction products were also modified with hexakis (methoxymethyl) melamine and with a butylphenol resol. The use of diene polymers from 2-methyl-1,3-butadiene, 2,3-dimethyl-1,3-butadiene, and chloroprene is also claimed.

```
ANSWER 4 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
L5
AN
     1967:38960 CAPLUS
DN
     66:38960
ΤI
     Polyurethans
IN
     Langrish, John; Marklow, Raymond J.
     Imperial Chemical Industries Ltd.
PA
SO
     Brit., 4 pp.
```

CODEN: BRXXAA

DT Patent LΑ English

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE ----\_\_\_\_\_ -----\_\_\_\_\_ PΙ GB 1049288 19661123 GB 19620716

GΙ For diagram(s), see printed CA Issue.

AB cf. preceding abstract Polyurethans are prepared from organic polyisocyanates and hydroxyl-terminated polyethers, which are prepared from alkylene oxides and melamines. Thus, I (J. Am. Chemical Society 73, 2901(1951)) 500, xylene 600, water 5, and KOH 5 were mixed and 200 parts xylene were distilled Propylene oxide (I) (476 parts) was added over 8 hrs. at 100° and 20 psi. The remaining xylene was distilled and 411 parts I was added over 5.25 hrs. Residual I was removed by distillation at 100° and 10 mm., giving 1190 parts of viscous liquid (II), OH number 335 mg. KOH/g., which was dissolved in iso-BuCOMe, filtered, and devolatilized. A coating composition was prepared from II 100, water 2, butylated urea-HCHO resin 5, cyclohexanone 53, iso-BuCOMe 212, and 50% phosgenated diaminodiphenylmethane in xylene 300 parts, coated on steel, and dried at room temperature The coatings withstood >78 weeks exposure to 100% humidity or salt spray and >73 months exposure to MeCO: Et and 25% aqueous NaOH at 40°. The polyurethans can also be used in rigid foams and crosslinked to form elastomers.